Job Opening: Student Research Assistant

Schatz Energy Research Center

Applications due by Monday, September 8, 2025, at 8 am (Pacific)

The Schatz Energy Research Center at Cal Poly Humboldt has multiple openings for undergraduate or graduate Student Research Assistants (SRAs) to join our carbon life cycle analysis team on a project to evaluate carbon flows and impacts from burning forest residue (slash) piles.

Positions are available for the Fall of 2025 (~September - December) and Spring of 2026 (~February - June). The exact start and end dates for each position will be established in discussion with the selected candidates. We plan to host a first round of hiring in Fall 2025, and host a second hiring round for Spring 2026.

We work in a hybrid environment that supports flexibility and connection. Our team members currently have the option to work onsite or alternate between working remotely and at least 40% onsite at the Schatz Center. For this position, SRAs may also work at field sites in Humboldt, Del Norte, Trinity and Mendocino Counties.

About the Project

Project Title: *Controlled burning of forest slash piles: tracking emissions and carbon flows*

In modeling forest residue utilization pathways and climate impacts, we've found that the amount and type of material left over after burning is a key source of uncertainty that hasn't been adequately studied. The project will aim to: (1) quantify the portion of the initial carbon still remaining on the ground after a pile burn, (2) characterize the material properties of the residual carbon in order to estimate its resistance to decay (recalcitrance), and (3) estimate the amount of carbon that was released from the soil.

Position summary

SRAs will support the goals of this project through efforts in planning, conducting fieldwork, data entry, and lab analysis. The work will include surveying (unburned) piles in recently managed forests, which will include taking measurements and recording additional characteristics of the piles in order to quantify the amount of material in the piles (including their location, and various qualitative estimates and descriptions). After the piles are burned in the winter, the same piles will be visited again in the Spring to measure remaining material (quantity and other characteristics) and to collect residual material and soil samples for lab analysis.

Responsibilities

Depending on skills, experience, and project needs, the Student Research Assistant may:

- Office-based:
    - Assist with experimental design and project planning, including literature review
    - Assist with site selection, including geospatial analysis of sites, mapping, and communication with land managers (for details on site silvicultural prescriptions and site access)
    - Input field and lab data into a spreadsheet
    - Conduct statistical analysis
    - Report writing
- In the field:
    - Conduct initial surveys of forest slash piles including using survey equipment and manually measuring piles. This may involve traversing over rugged and uneven ground.
    - Sample leftover pieces of wood and charred wood including the operation of a chainsaw or hand saw and detailed collection of material from the ground.
    - Take soil cores following protocol
- In the lab (Spring 2026):
    - Conduct residual material analysis including analysis of soil, char and wood using various laboratory equipment.

Note: The list of responsibilities is subject to change. Field work and lab work will not be evenly spread out over the semester and will require most hours completed within a several-week window (especially for the fall field crew, which will mainly work between September 15-November 15).

Qualifications

Minimum qualifications

Education and Experience

- Eligible applicants must be students in good academic standing at Cal Poly Humboldt who are registered for at least 6.0 units as an undergraduate student or 4.0 units as a graduate student
- Prior experience or coursework involving field and/or lab work
- Prior education and/or coursework in STEM related fields

Knowledge, skills, and abilities

- Strong attention to detail and ability to closely follow written and verbal instructions
- Ability to communicate effectively in written and interpersonal contexts
- Comfortable with physical labor, including lifting up to 40 lbs (for the field positions)
- Comfort with or willingness to learn use of tools such as chainsaws or hand saws for field-based sample collection (for the field positions)
- Comfortable being in remote field locations (for the field positions)
- Proficiency with Microsoft Excel and Word
- Ability and willingness to work with and learn from others effectively in a team setting
- Ability to self-motivate and follow through on assignments
- Interest and enthusiasm for issues related to science and the environment

Desirable experience or training

(The following are welcome, but they are not required to be eligible for the position.)

Experience or training in:

- Experience and/or coursework GIS tools (e.g., ArcGIS or QGIS)
- Experience using maps, GPS, or other survey equipment
- Experience and/or coursework using R, Python, or other coding language

- Experience using a bomb calorimeter or other lab equipment for material elemental analysis
- Valid driver's license
- Drone pilot license

Important note: This vacancy announcement includes both (a) minimum qualifications as well as (b) desirable experience or training. Research shows that many women and people of color, in particular, feel that they have to have 100% of both required and desired skills and experience before applying for a new job. We want to reiterate that the desirable experience and training options listed above are not required to apply for a position on our team. If you meet the minimum qualifications, we encourage you to apply.

Compensation

These positions are non-benefited hourly positions with variable workload ranging from 5-20 hours per week, depending on the role and project needs. Field work and lab work will not be evenly spread out over the semester and will require most hours completed within a several-week window (especially for the fall field crew, which will mainly work between September 15-November 15). The wage is $16.50-$23.00 per hour. After 90 days of employment, SRAs become eligible for 40 hours of sick leave per calendar year.

How to apply

Deadline

All application materials must be received by **Monday, September 8, 2025, at 8 am (Pacific)**

Materials

Applicants must submit the following via email to schatzenergy@humboldt.edu:

1. In your email subject line, include your full name and the project title. Example: *"Jordan Kim – Controlled Burning of Forest Slash Piles Job Application"*
2. A formal letter of application (cover letter), attention: Schatz Center Hiring Committee, that,
    a. Describes your background and what motivates you to apply.
    b. Addresses your experience with the qualifications described above and provides examples of experience, including descriptions of any relevant work/volunteer experience and/or a listing/description of relevant college/university courses successfully completed.
3. A resume (2 page maximum).

Note: Your cover letter will be used as a writing sample to assess the quality of your writing.

Additional materials may be required from candidates invited to interview.

Who we are

Since 1989, the Schatz Center has been a leader in applied research and project development for clean and renewable energy. Our current portfolio includes microgrid development, sustainable transportation design, carbon life cycle analysis, solar product testing, offshore wind feasibility studies, and planning and policy for clean energy access around the globe.

As residents of a rural coastal community, we are keenly aware of our social and environmental responsibilities. We are committed to increasing energy access and resilience for communities worldwide — and do so through clean and renewable design that reduces climate change and restores environmental and human health.

Our organizational commitments

Our Vision

The Schatz Center envisions a healthy planet with thriving, equitable, resilient communities powered by clean energy.

Our Purpose

Our team is committed to addressing climate change and improving human and ecosystem health through work that supports clean energy, climate-resilience, equity, and justice. Our work includes:

- **Research and development** – we do applied research focused on energy and environmental issues.
- **Technology deployment** – we design, integrate, build, test, and operate innovative, renewable, and resilient energy systems that are responsive to social and environmental needs.
- **Collaboration** – we work with public and private partners including Tribal Nations, communities, agencies, academic institutions, foundations, and industry to exchange knowledge and implement innovative solutions locally and internationally.
- **Education and Training** – we support learning that provides practical, hands-on experience for current and future practitioners and leaders.

Our Values

We value:

- **Kindness**: Treating people and the planet with care and respect through acts of inclusion, helpfulness, generosity, and encouragement.
- **Integrity**: Approaching one another and our interdisciplinary research with curiosity, open-mindedness, transparency, and humility.
- **Equity, Diversity, and Inclusion**: Providing a nourishing and rewarding environment for Center staff, students, and partners. Respecting the differences of our colleagues and actively seeking to identify and remove barriers to ensure opportunities to thrive.
- **Justice**: Working to advance racial justice, gender equality and women's empowerment, LGBTQIA+ rights, economic equality, and environmental justice.
- **Teamwork and Collaboration**: Supporting internal and external community building and engagement to create inclusive and innovative solutions. Sharing knowledge with and learning from our colleagues, collaborators, community partners, and the public to advance understanding.
- **Effectiveness**: Using our technical, scientific, and policy expertise to do good work that makes a difference.

Questions and inquiries

- For assistance with the application process, please submit an Accommodation Request Form, which can be at https://forms.humboldt.edu/spf-accomodation-request-form, or contact the campus ADA Coordinator at (707) 826-3626 or confidential fax at (707) 826-3625. For more information regarding accommodation, you may also visit the Cal Poly Humboldt Campus Disability Resource Center at https://disability.humboldt.edu/employee-accommodation. Individuals in need of a telecommunications relay service may contact the California Relay Service at (877) 735-2929 TTY.
- Learn more about our employment opportunities at schatzcenter.org/jobs.
- For additional information, please email schatzenergy@humboldt.edu or call (707) 826-4345.

Cal Poly Humboldt.